

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-36. (Canceled)

37. (Currently Amended) A visiting plan generation system as claimed in ~~claim 36~~ claim 45, wherein the state re-arrangement means comprises:

new-assignment means for newly assigning an unassigned destination to a group based on a state X memorized in the state memory means;

re-assignment means for re-assigning an already assigned destination based on a state X memorized in the state memory means;

group re-arrangement means for re-arranging groups based on a state X memorized in the state memory means.

Claim 38. (Canceled)

39. (Currently Amended) A visiting plan generation system as claimed in ~~claim 36~~ claim 45, wherein the information on a group contains the members constructing a group and constraints ~~comprising relationships among~~ between the members of the group.

40. (Currently Amended) A visiting plan generation system as claimed in ~~claim 36~~ claim 45, wherein the information on a group contains information that said group is an invariable-member group in which the members of the group cannot be re-arranged, or said group is a variable-member group in which the members of the group can be re-arranged.

Claim 41. (Canceled)

42. (Currently Amended) A visiting plan generation system as claimed in ~~claim 36~~ claim 45, wherein the state re-arrangement means re-arranges members of the group and visiting plan thereof to an optimum state, in which a state cost function $F(X)$ giving maximum value of the cost among the groups is minimized by using the visiting plan X_i of the group i under the state X and the visiting plan cost $F_i(X_i)$ thereof.

43. (Currently Amended) A visiting plan generation system as claimed in ~~claim 36~~ claim 45, wherein the state re-arrangement means re-arranges members of the group and visiting plan thereof to an optimum state, in which a state cost function $F(X)$ giving average value of the cost among the groups is minimized by using the visiting plan X_i of the group i under the state X and the visiting plan cost $F_i(X_i)$ thereof.

44. (Previously Presented) A visiting plan generation system as claimed in claim 39, wherein the group constraints contains a maximum number of the members which can belong to the group.

45. (New) A visiting plan generation system, comprising:

a plan generating means for generating a visiting plan of a group at a predetermined point of time, based on information including locations of destinations, and conditions of tasks to be performed as information on said destinations, and information of said group constructed by a plurality of members including a mobile capacity (speed of movement) and a working capability defined by time required for the tasks of said members necessary for visiting plan generation;

a destination assignment means for assigning a destination to the group and the members of the group when the plan generating means generates the visiting plan;

a state memory means for memorizing a state X showing said visiting plan generated, the members of said each group and information on destination assignment to each group, and an optimum state in preceding visiting plan conditions;

a state re-arrangement means connected with said state memory means for re-arranging the visiting plan to an optimum states by re-arranging the destination to the group and the members of the group based on the state X memorized in said state memory means;

a cost calculation means for calculating total time spent in moving and total time spent in working as the visiting plan cost $F_i(X_i)$ of each group, based on information including locations of destinations, and conditions of tasks to be performed as information on said destinations, and information of said group constructed by a plurality of members including a mobile capacity (speed of movement) and a working capability defined by time required for the tasks of said members necessary for visiting plan generation;

a plan re-formation means for re-forming a visiting plan X_i for each group based on information including locations of destinations, and conditions of tasks to be performed, information of said group constructed by a plurality of members including a mobile capacity (speed of movement) and a working capability defined by time required for the tasks of said members, and information of visiting plan cost $F_i(X_i)$ of the group, and sending the re-formed visiting plan data to said state re-arrangement means;

wherein said state re-arrangement means re-arranges members of the group and visiting plan thereof to an optimum state, using the visiting plan X_i of the group I under the state X sent from the plan re-formation means and the visiting plan cost $F_i(X_i)$ thereof, and sending the re-arranged visiting plan data to the state memory means as a visiting plan of the group I to an optimum state.